

REMARKS

Claims 1, 3-9 and 12-21 are now in the application. Claims 1, 3-9, 12 and 14-21 are drawn to the elected invention. Claim 13 is directed to a non-elected invention and may be cancelled by the examiner upon the allowance of the claims directed to the elected. Claim 1 has been amended to recite “the method further comprising between step (1) and the step (2), a drying step of heating the conductive material with an adhesive resin layer formed thereon in a temperature range within which no curing reaction occurs, the cationic electrodepositable adhesive composition is substantially incapable of generating any volatile component in the step of heating for curing, the step (2) comprises a step of adhesion with heating and a step of curing by heating”. Claims 1, 4, 15 and 16 have been amended by deleting the word “the”, where deemed appropriate, for purposes of clarification and not to limit their scope. Claims 3 and 14 have been amended to correct some spelling errors and not to limit their scope. Claim 9 has been amended to depend from claim 8 as suggested by the examiner for purposes of clarification and not to limit its scope. Claims 2, 10 and 11 have been cancelled without prejudice or disclaimer. Claim 20 has been amended to depend from claim 2 instead of claim 1. Basis for the amendment to claim 1 and newly presented claim 21 can be found at page 27, line 25 to page 28, line 1 of the specification and original claims 2 and 11. The amendments to the claims and newly presented claim 21 do not introduce any new matter.

The objection to claims 3 and 14 and the rejections of claims 1-12 and 14-20 under 35 USC 112, second paragraph have been overcome by the above amendments to the claims and/or are not deemed tenable.

Claims 1-12 and 14-20 were rejected under 35 USC § 103 (a) as being unpatentable over US Patent 4,781,969 to Kobayashi et al. in view of US Patent 5,676,812 to Kadokura and US Patent 6,262,146 to Sakamoto et al. The cited references do not render obvious the above claims as amended. In particular, the cited references fail to render obvious the present invention since, among other things, the cited references do not disclose that “between step (1) and the step (2), a drying step of heating the conductive material with an adhesive resin layer formed thereon in a temperature range within which no curing reaction occurs” as now recited in the claims.

This is because, in a general cationic electrodepositable compound, if the drying step would be carried out, detached objects generated in the curing reaction by heating (blocking agent of a block polyisocyanate as a hardener that would be detached in the curing reaction) would remain without being removed. Consequently in the curing reaction by heating in the step (2), the remaining detached objects would cause bubbles to be generated inside the adhesion resin layer. This would greatly reduce adhesiveness of the adhesive resin layer in a laminate that would be an end product.

Furthermore, in a general cationic electrodepositable compound, for example, in the curing reaction in the heating step (2), if the drying step would be carried out in so high a temperature that the bubbles due to the detached objects would not remain inside the adhesive resin layer, the curing reaction of the adhesive resin layer would proceed, which would greatly reduce adhesiveness of the adhesive resin layer.

For this reason, it would have been difficult and, in fact, not obvious for a person skilled in the art to make the invention as recited in claim 1 based on the combinations of the cited references. Accordingly, the present claims are not obvious over the cited references.

The method of the present invention includes “between step (1) and the step (2), a drying step of heating the conductive material with an adhesive resin layer formed thereon in a temperature range within which no curing reaction occurs”. As compared with the cited references, the present invention allows for sufficient removal of a volatile component such as a solvent remaining in the adhesive resin layer, thereby increasing and equalizing strength and insulation. More specifically, the drying step in the present invention allows for sufficient removal of a volatile component such as a solvent remaining in the adhesive layer, which prevents the adhesive layer from including bubbles therein, thereby increasing adhesive strength.

Further, in the invention as recited in claim 1, the cationic electrodepositable adhesive composition is substantially incapable of generating any volatile component in the step of heating for curing. Consequently, in the step of adhesion with heating and the step of curing by heating, no bubbles are generated inside the adhesive layer, which increases adhesive strength.

The references do not teach or suggest all of the claim limitations. The prior art references when combined must teach or suggest all of the claim limitations in a proper obviousness rejection. *In re Vaeck*, 947 F.2d 488, (Fed. Cir. 1991).

The cited art lacks the necessary direction or incentive to those of ordinary skill in the art to render the rejection under 35 USC 103 sustainable. The cited art fails to provide the degree of predictability of success of achieving the properties attainable by the present invention needed to sustain a rejection under 35 USC 103. See *KSR Int'l Co. v. Teleflex, Inc.*, 127 S.Ct. 1727; 82 USPQ2d 1385 (2007), *Diversitech Corp. v. Century Steps, Inc.* 7 USPQ2d 1315 (Fed. Cir. 1988), *In re Mercier*, 185 USPQ 774 (CCPA 1975) and *In re Naylor*, 152 USPQ 106 (CCPA 1966).

Moreover, the properties of the subject matter and improvements which are inherent in the claimed subject matter and disclosed in the specification are to be considered when evaluating the question of obviousness under 35 USC 103. See *KSR Int'l Co. v. Teleflex, Inc.*, supra; 82 USPQ2d 1385 (2007), *Gillette Co. v. S.C. Johnson & Son, Inc.*, 16 USPQ2d. 1923 (Fed. Cir. 1990), *In re Antonie*, 195, USPQ 6 (CCPA 1977), *In re Estes*, 164 USPQ 519 (CCPA 1970), and *In re Papesch*, 137 USPQ 43 (CCPA 1963).

No property can be ignored in determining patentability and comparing the claimed invention to the cited art. Along these lines, see *In re Papesch*, supra, *In re Burt et al*, 148 USPQ 548 (CCPA 1966), *In re Ward*, 141 USPQ 227 (CCPA 1964), and *In re Cescon*, 177 USPQ 264 (CCPA 1973).

In view of the above, consideration and allowance are respectfully solicited.

In the event the Examiner believes an interview might serve in any way to advance the prosecution of this application, the undersigned is available at the telephone number noted below.

The Office is authorized to charge any necessary fees due with this paper to Deposit Account No. 22-0185, under Order No. 27604-00001-US1 from which the undersigned is authorized to draw.

Dated:

Respectfully submitted,

Electronic signature: /Burton A. Amernick/
Burton A. Amernick
Registration No.: 24,852
CONNOLLY BOVE LODGE & HUTZ LLP
1875 Eye Street, NW
Suite 1100
Washington, DC 20006
(202) 331-7111
(202) 293-6229 (Fax)
Attorney for Applicant